CITY COUNCIL

AGENDA REQUEST

AGENDA OF:	**11-19-13**	**AGENDA REQUEST NO:**	**VII-A**
INITIATED BY:	**LISA KOCICH-MEYER, AICP** **PRINCIPAL PLANNER**	**RESPONSIBLE DEPARTMENT:**	**TRANSPORTATION & LONG-RANGE PLANNING**
PRESENTED BY:	**LISA KOCICH-MEYER** **PRINCIPAL PLANNER**	**DIRECTOR:**	**STACIE HENDERSON,** **COMMUNITY DEVELOPMENT ADMINISTRATOR**
	RICK RAMIREZ, PE **WATER RESOURCES MANAGER**	**ADDITIONAL DIRECTOR (S):**	**KENNETH RENEAU,** **INTERIM DIRECTOR OF WATER UTILITIES**
SUBJECT / PROCEEDING:	**WATER MASTER PLAN PHASE 2 UPDATE/ WORKSHOP**		
EXHIBITS:	**WATER MASTER PLAN – PHASE 2 – POLICY WHITE PAPER TOPICS**		

CLEARANCES		APPROVAL	
LEGAL:	**N/A**	**EXECUTIVE DIRECTOR:**	**JIM CALLAWAY**
PURCHASING:	**N/A**	**ASSISTANT CITY MANAGER:**	**KAREN DALY**
BUDGET:	**N/A**	**CITY MANAGER:**	**ALLEN BOGARD**

BUDGET

EXPENDITURE REQUIRED: $	**N/A**
CURRENT BUDGET: $	**N/A**
ADDITIONAL FUNDING: $	**N/A**

RECOMMENDED ACTION

Receive a workshop reviewing progress on Phase II of the Water Master Plan Update and provide feedback on Phase II policy issues.

EXECUTIVE SUMMARY

The Water Master Plan is one of the City's eight (8) official master plans and was last updated in 2007. The Water Master Plan is an implementation tool that describes the infrastructure and policies necessary to accomplish the water-related goals of the City's Comprehensive Plan. The current update is necessary to revise development projections, meet regulatory requirements, integrate surface water conversion, provide water resource planning and develop strategies to implement the recently-adopted water-related guidance in the Comprehensive Plan.

The process to update the Water Master Plan is occurring in a two-phase approach.

Phase I

Phase 1 is now complete and includes "traditional" master planning functions relating to planning for growth and regulatory requirements. This planning involved the development of growth projections and a water system model. Phase I also addressed regulatory requirements imposed by governmental agencies such as the Texas Commission on Environmental Quality (TCEQ) and the Fort Bend Subsidence District (FBSD).

Phase II

Phase II will address broader policy issues and develop recommendations for addressing these issues. Phase II will focus on developing greater definition of the water-related goals and objectives of the Comprehensive Plan and developing strategies, specific initiatives, and policies to accomplish these goals and objectives and the City's overall vision.

In this workshop, staff will provide an update on Phase II progress. The update will include a review of:

- Public input received during public input opportunities conducted earlier this year including an Online Town Hall topic, stakeholder meetings and a public meeting held in September;
- A draft vision statement and set of goals; and
- Policy issues and priority questions to be addressed during Phase II of the update.

Following the workshop, next steps include development of draft policy recommendations and draft strategies and initiatives. These recommendations will be reviewed with City Council and the public prior to the review and approval of the final draft plan.

EXHIBITS

WATER MASTER PLAN – PHASE 2 – POLICY WHITE PAPERS

Below is a list of the draft policy topics for the 6 white papers to be developed during Phase 2 of the Water Master Plan Update.

1. WATER RESOURCES

PURPOSE: This white paper will assess the City's existing water resources, make recommendations on whether to secure additional water supplies and guide the City's future water supply decisions.

TOPIC LEADER: Rick Ramirez (support from Colleen and Jessie)

Existing Documents/Policy or Previous Work:

- Existing flow and metering data for all wells and surface water pumps
- Copies of contracts with water suppliers that outline use of water rights and contract water.
    - BRA Contract for 6,388 AC-FT of raw surface water
    - DRAFT water lease contract with WCID No. 2 for 6.5 MGD of raw surface water
    - GCWA Canal Lease Agreement
    - GCWA Option Contract
    - DRAFT of GCWA System Raw Water Availability Agreement
    - Oyster Creek Water Right (COA 11-5170)
    - Settlement Agreement between COSL and GCWA for use of Oyster Creek Water Right (COA 11-5170)
- Policy Documents
    - Infrastructure Evaluation Policy (8000-10)
    - Conversion from Groundwater to Surface Water Supplies for City and ETJ (8000-11)
    - Groundwater Reduction Plan (8000-12)
    - Non-Potable Water (City Supplied) (8000-13)
    - Water Conservation – Promotion (8000-14)
    - Standards for Beautification, Streetscape, Lighting and Maintenance (8000-15)
    - Drought Plan

Policy Questions:

A. How much is enough (Water supply)?
    i. What are our currently utilized water resources?
    ii. What additional owned/secured water rights/resources does the City have?
    iii. What is the projection and trigger for when we would need each additional water resource?
    iv. What is the reliability of each water resource?
    v. What are the risk management strategies for each water resource?
    vi. What are the costs of each risk management strategy?

vii. Are there other alternative water resources we should investigate?
viii. Should we secure additional alternative water resources?
    a. Are additional water resources needed?
    b. If yes, what are the most feasible water resources available?
    c. What would be the circumstances (partnerships, grants, etc) that would prompt the City to participate in the Allen's Creek Reservoir?
        a. City of Houston is interested but needs a commitment from another entity
ix. What factors might alter the current projection that the City has sufficient water to meet build-out needs?
    a. Parks projects
    b. New development/neighborhoods
    c. Redevelopment/densification
        a. [ex. Design Policy statement – in a PER include water usage projections/source]
x. How might these needs be altered by system improvements/enhancements, increased water conservation efforts or other environmental sustainability concepts?

B. Water distribution
    i. How are we using each of our water sources currently?
    ii. How do we prioritize use of each water resource?
        a. Different resources have varying costs and expiration dates
    iii. What is the optimal use for each source?
        a. Residential, commercial, irrigation, industrial
    iv. What is the right measurement tool for deciding when to use different sources?
C. Drought Planning
    i. Should the drought plan be revised to incorporate stricter restrictions during drought conditions?
    ii. What are the benefits of increased restrictions?
D. Wells
    i. Plan for use during peak levels

2. WATER CONSERVATION

PURPOSE: This white paper will document the City's position on water conservation and recommend water reduction goals and approaches to water conservation to achieve these goals.

TOPIC LEADER: Colleen Spencer (support from Rick, Dawn, Claudia and Gabe)

Existing Documents/Policy or Previous Work:

- Water Conservation Plan
- Current Water Conservation Programs
- City's Environmental Stewardship Policy
- Water Conservation – Promotion (8000-14)
- Standards for Beautification, Streetscape, Lighting and Maintenance (8000-15)
- Promotion of Environmental Stewardship (3000-24)
- Irrigation Conservation Programs:
  - Two day a week irrigation impacts [to be provided]
  - Residential irrigation system evaluations by Vepo (City funded, free for residents)

Policy Questions:

A. Where is the balance between community standards & values (the "look of the City": beautiful and inviting amenities, roadways, parks, lakes) and environmental ideals (saving water)?

B. How will/can increased water conservation efforts impact:
   I. our future water needs?
   II. our future water infrastructure needs?
   III. meeting our environmental goals?
   IV. community aesthetics and values?

C. What are the City's goals for water conservation? (triple bottom line analysis: economic, social, environmental)
   I. How are the goals measured?
   II. Should the City adopt a numerical goal?
      i) If so, what should be our numerical goal to achieve and by what date?
   III. How will impactful goals and associated programs impact community values?
   IV. Will achieving impactful goals unfairly burden one customer class? (resident can't water but business can have large fountains)

D. What tools and programs should be implemented to achieve our goals? (specific rate structure, regulations, building codes, subdivision review, design standards, education, rebates, etc.)
   I. What is the cost to implement each tool/program to meet those water conservation goals?
   II. What is the amount of conservation expected?
   III. How can the amount of conservation be measured?

E. Does the City want water conservation to impact future water demands?
F. What should the City do to demonstrate it wants to be a leader in water conservation?
G. How can the City's conservation efforts be included in the City's GRP to earn Groundwater Credits?
H. Wise guys – evaluate the effectiveness
I. What should the City's role be in providing programs/incentives to install/upgrade to efficient irrigations systems?

3. RECLAIMED AND NON-POTABLE (RAW)

PURPOSE: This white paper will document the City's position on the use of reclaimed and non-potable water and recommend criteria for evaluating future reclaimed and non-potable projects.

TOPIC LEADER: Rick Ramirez (support from Colleen and Karen)

Existing Documents/Policy or Previous Work:

- Existing flow and metering data for all wells and surface water pumps
- DRAFT Agreement/Term Sheet between the City and MUD 128 for reclaimed facility
    - Interview will be required with R. Ramirez
- Policy Documents
    - Conversion from Groundwater to Surface Water Supplies for City and ETJ (8000-11)
    - Groundwater Reduction Plan (8000-12)
    - Non-Potable Water (City Supplied) (8000-13)
    - Water Conservation – Promotion (8000-14)
- Existing Agreements
    - LID 7
    - MUD 128
    - SPAs
- GP Agreements
- Reclaimed Water Studies

Policy Questions:

A. What is the City's current policy on the use of reclaimed and non-potable (raw) water?
B. A rate for reclaimed water has not been set by the City. How should the City set a rate for reclaimed water? What are the criteria for setting a rate? ← MUD 128 agreement says that we will never charge more than the raw surface water rate set by GCWA
C. What reclaimed opportunities are there in the future?
    a. Who should initiate these projects?
    b. Who are the potential partners?
D. What is the structure for how we would respond to other entities wanting to do a reclaimed and non-potable project?
    a. Under what conditions would the City allow the project?
        i. If the City GRP Pays for the facility
        ii. If the entity pays for the facility
        iii. If the City owns the facility
        iv. If the entity owns the facility
        v. Interview with R. Ramirez is required
    b. Is cost benefit analysis the only measure when pursuing non-potable projects?

E. Should we give benefits (incentive, reduced rate) to GRP participants using alternative water sources?
    a. A reduced GRP rate for reclaimed water
    b. Incentives for ETJ communities
    c. Raw water rate
F. What available financing/program options does the City support for new developments wanting to include environmental concepts?
G. Legislation
    a. How do we want to advocate legislatively?
    b. What is our position?
H. Water Conservation
    a. What are possible water conservation strategies for reclaimed water?
    b. How should the use of reclaimed water tie into our overall drought planning and drought contingency plan?

4. RATE STRUCTURE

PURPOSE: This white paper will document the City's position on changing the Utility Fund customer rate structure to affect water consumption and recommended use of the funds and a summary of all GRP water rates.

TOPIC LEADER: Ken Reneau (support from Paul, Rick, Jennifer May, Jennifer Brown and Colleen)

Existing Documents/Policy or Previous Work:

- Current Rate Structure http://www.sugarlandtx.gov/index.aspx?nid=322
- RW Beck January, 2007 Study – provides an understanding of where we were in the past and why we reached the conclusions to set the program we have today.

Policy Questions:

A. Utility Fund – potable drinking water rate charged to customers
    i. Do you raise the rates for the high discretionary (excessive) user?
    ii. If yes, do you reserve the additional revenues to fund future water projects?
    iii. Or, do you reduce the rate of the low/moderate user to be revenue neutral?

B. Rate Model
    i. List assumptions [policy considerations]
    ii. Review base rate
    iii. Review customer consumptive levels for three year period

C. Conservation Rate
    i. Should there be a conservation rate structure? – What will incentivize/encourage people to conserve?
    ii. If a considerable reduction in consumptive use occurs, what impact could this have on Utility Fund revenues?

D. Surface Water Fund - summary of other rates
    i. GRP rate
        a. What is the City's existing policy on the GRP rate (per source?)
        b. Should there be separate GRP rates (per source)?
            a. Reclaimed water rate
            b. Surface Water Pump Stations (raw water)
            c. Well Water
            d. Surface Water

5. GRP

PURPOSE: This white paper will document the City's policy to meet regulatory requirements and GRP governance issues.

TOPIC LEADER: Rick Ramirez (support from Colleen, Jennifer Brown, Ken, Karen, Rob Valenzuela)

Existing Documents/Policy or Previous Work:

- Existing flow and metering data for all wells and surface water pumps
- Copies of contracts with water suppliers that outline use of water rights and contract water.
    - BRA Contract for 6,388 AC-FT of raw surface water
    - DRAFT water sublease agreement with WCID No. 2 for 6.5 MGD of raw surface water
    - GCWA Option Contract
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    - Groundwater Reduction Plan (8000-12)
    - Non-Potable Water (City Supplied) (8000-13)
    - Water Conservation – Promotion (8000-14)
    - Standards for Beautification, Streetscape, Lighting and Maintenance (8000-15)
- FBSD Regulations and Other Papers
    - FBSD Rules
    - 2003 Regulatory Plan
    - Disincentive Fee Resolution
    - 2013 Annual Groundwater Report
    - Water Conservation Credits Policy 2009
    - Over Conversion Credit Policy

Policy Questions:

A. FBSD Compliance
    i. What is the history/background of the FBSD?
    ii. What are the regulatory requirements?
    iii. What is the City's policy for determining projects and strategies for compliance with FBSD regulations?

iv. Should the City revise the GRP to get credits from the FBSD for water conservation efforts?

B. Conversion Credits
   i. What is the value?
   ii. What is the adequate number of conservation and over-conversion credits in reserve?
   iii. Do we consider conversion credits in setting the rate?
   iv. What is the marketability of credits?
   v. How would we sell credits?

C. Governance
   i. What is the City's current position on GRP governance, including how GRP fees are set?
   ii. Should GRP participants have a role in setting rates and project approval?
   iii. Is there a need for a committee/advisory board to be involved in GRP governance?
   iv. What are your recommendations for stances to FBSD rules that are not equitable, fair, or negatively affect the City.
   v. 60% conversion – how should we proceed with meeting this requirement?
      a. What does the City need to do to meet this requirement and what is the plan? Or
      b. Should we push back?

D. Should water leave the GRP? [current ex. Royal Lakes Estates/Riverstone]

E. Should credits leave the GRP?

6. IRRIGATION and AESTHETIC WATER USE

PURPOSE: This white paper will provide specific guidance for both City and private irrigation systems.

TOPIC LEADER: Dawn Steph (support from Doug Schomburg, Clark Peschel, Rob Valenzuela, Chris Steubing, Reena Varghese, Colleen and Kimberly Terrell)

Existing Documents/Policy or Previous Work:

- Right-of-Way Water Cost Reimbursement Program Implementation Policy [10/5/2012]
- Ordinance No. 1725 - Establishing the minimum standards for installation of irrigation systems within the City's corporate limits and extraterritorial jurisdiction [2/17/2009]
- Voluntary Irrigation Schedules for residential, road ways and commercial (two days a week) maps: **http://www.sugarlandtx.gov/index.aspx?NID=650**
- Current Building Codes are the 2009 International Codes. Attached Link provides free access. http://publicecodes.cyberregs.com/icod/index.htm
- City Ordinance: Landscaping
- Entities responsible for road way irrigation:
  - City of Sugar Land (Parks & Recreation)
  - Chimneystone HOA
  - Colony Grant HOA
  - First Colony Community Association
  - The Highlands HOA
  - Settlers Park HOA
  - Sugarwood HOA
  - Ashford Lakes HOA
  - Avalon Community Association
  - Barrington Place HOA
  - Commonwealth Civic Association
  - Gannoway Lake Estates HOA
  - Glen Laurel HOA
  - Sugar Creek Homes Association
  - Sugar Lakes HOA
  - Sugar Mill HOA
  - Telfair HOA

Policy Questions:

A. What are the best management practices for irrigation systems?
   i. What are other cities doing?
B. What are the City's overall goals for irrigation?
C. Should the City develop standards for efficiency?
   i. If so, what are the recommended system design standards for efficient irrigation systems?
   ii. Guidelines for different types of irrigation applications
      a. Spray vs. drip
      b. Landscaping
      c. Design standards for types of plant

D. What should the City's role be in providing programs/incentives to install/upgrade to efficient irrigations systems?
    i. Program for non-potable use – concept: abide by strict smart irrigation system standards and receive water at a lower rate.
E. How should the City audit program/participants?
F. Should the City implement stricter installation requirements and inspection program?
G. Reimbursement rate
    i. What is the appropriate rate?
H. Savings
    i. What water savings can we get from efficient irrigation systems?
I. Lake Filling
    i. How much do we want to encourage alternate sources?
    ii. Recommendation for Development review – understanding what is the source for filling the lake?